CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE

APPENDIX J TO THE DRAFT MASTER PLAN FRAMEWORK (Glossary)

A Recommendation to the California Fish and Game Commission by the California Department of Fish & Game



Appendix J. Glossary

The MLPA includes the definition of several key terms. These are as follows:

The following terms are defined in Fish and Game Code Section 2852:

- "(a) "Adaptive management," with regard to marine protected areas, means a management policy that seeks to improve management of biological resources, particularly in areas of scientific uncertainty, by viewing program actions as tools for learning. Actions shall be designed so that, even if they fail, they will provide useful information for future actions, and monitoring and evaluation shall be emphasized so that the interaction of different elements within marine systems may be better understood."
- "(b) "Biogeographical regions" refers to the following oceanic or near shore areas, seaward from the high tide line or the mouth of coastal rivers, with distinctive biological characteristics, unless the master plan team establishes an alternative set of boundaries (emphasis added):
 - (1) The area extending south from Point Conception.
 - (2) The area between Point Conception and Point Arena.
 - (3) The area extending north from Point Arena."
- "(c) "Marine protected area" (MPA) means a named, discrete geographic marine or estuarine area seaward of the high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna that has been designated by law, administrative action, or voter initiative to protect or conserve marine life and habitat. An MPA includes marine life reserves and other areas that allow for specified commercial and recreational activities, including fishing for certain species but not others, fishing with certain practices but not others, and kelp harvesting, provided that these activities are consistent with the objectives of the area and the goals and guidelines of this chapter. MPAs are primarily intended to protect or conserve marine life and habitat, and are therefore a subset of marine managed areas (MMAs), which are broader groups of named, discrete geographic areas along the coast that protect, conserve, or otherwise manage a variety of resources and uses, including living marine resources, cultural and historical resources, and recreational opportunities."
- "(d) "Marine life reserve," for the purposes of this chapter, means a marine protected area in which all extractive activities, including the taking of marine species, and, at the discretion of the commission and within the authority of the commission, other activities that upset the natural ecological functions of the area, are prohibited. While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state."

Fish and Game Code Section 2860 (b) further clarifies permissible activities in "marine life reserves":

"Notwithstanding any other provision of this code, the taking of a marine species in a marine life reserve is prohibited for any purpose, including recreational and commercial fishing, except that the commission may authorize the taking of a marine species for scientific purposes, consistent with the purposes of this chapter, under a scientific collecting permit issued by the department ."(emphasis added)

The MLPA uses but does not define other terms. The following working definitions are drawn from a survey of California and federal law and regulation as well as the scientific literature. Where definitions were available from state law, regulation, or management, these were selected. Otherwise, the definitions below are selected from federal law or the scientific literature. The source for each definition is noted.

Abundance: *Natural abundance* is the total number of individuals in a population protected from, or not subjected to, human-induced change (adapted from Department 2004 and Kelleher 1992). Relative abundance is an index of fish population numbers used to compare populations from year to year (Department 2002a).

Biodiversity: A component and measure of ecosystem health and function. It is the number and genetic richness of different individuals found within the population of a species, of populations found within a species range, of different species found within a natural community or ecosystem, and of different communities and ecosystems found within a region (Public Resources Code subsection 12220[b]).

Community: Natural community means a distinct, identifiable, and recurring association of plants and animals that are ecological interrelated (FGC subsection 2702[d]).

Ecosystem: The physical and climatic features and all the living and dead organisms in an area that are interrelated in the transfer of energy and material, which together produce and maintain a characteristic type of biological community (Department 2002b).

Ecosystem disturbance: A discrete event, either natural or human induced, that causes a change in the existing condition of an ecological system (Kaufmann 1994).

Ecosystem function: The processes through which the constituent living and nonliving elements of ecosystems change and interact, including biogeochemical processes and succession (Kaufmann 1994).

Ecosystem integrity: The ability of an ecosystem to support and maintain a balanced, harmonious, adaptive biological community that demonstrates species composition, diversity and functional organization comparable to that of natural habitat in the region (FAO 2003).

Ecosystem structure: The spatial arrangement of the living and nonliving elements of an ecosystem (Kaufmann 1994).

Habitat: The living place of an organism or community, characterized by its physical or biotic properties (Allaby 1998).

Intrinsic value: The value that that thing has "in itself," or "for its own sake," or "as such," or "in its own right" (Zimmerman 2004).

Natural diversity: The species richness of a community or area when protected from, or not subjected to, human-induced change (drawn from Allaby 1998 and Kelleher 1992).

Sources for definitions:

- Allaby, M. 1998. Concise Oxford dictionary of ecology. New York Oxford University Press (UK).
- Kaufmann, M. R., Graham, R. T., Boyce, D. A., Jr., Moir, W. H., Perry, L., Reynolds, R. T.,
 Bassett, R. L., Mehlhop, P., Edminster, C. B., Block, W. M., and Corn, P. S. 1994. An ecological basis for ecosystem management. Gen. Tech. Rep. RM 246. Fort Collins,
 CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 22 p.
- Kelleher, K, Kenchington, R. 1992. Guide-lines for Establishing Marine Protected Areas. International Union for the Conservation of Nature.
- State of California Department of Fish and Game, Marine Region (Department 2002a). 2002. Draft Abalone Recovery and Management Plan.
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- State of California Department of Fish and Game, Marine Region (Department 2004). 2004. Draft Market Squid Fishery Management Plan.
- United Nations Food and Agriculture Organization (FAO). 2003. The Ecosystem Approach to Fisheries. FAO Technical Guidelines for Responsible Fisheries, No.4, Suppl.2.

Zimmerman, M.J. 2004. "Intrinsic vs. Extrinsic Value." The Stanford Encyclopedia of Philosophy (Fall 2004 Edition), Edward N. Zalta (ed.). http://plato.stanford.edu/archives/fall2004/entries/value-intrinsic-extrinsic/.